09/470,944

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*** YOU HAVE NEW MAIL ***

=> s (separat? or extract?)(5a) nucleic acid?
   3 FILES SEARCHED...
L1        20162 (SEPARAT? OR EXTRACT?)(5A) NUCLEIC ACID?

=> s l1 and metal oxide (5a) (support or surface or substrate)
   4 FILES SEARCHED...
L2           47 L1 AND METAL OXIDE (5A) (SUPPORT OR SURFACE OR SUBSTRATE)

=> s l2 and direct? (4a) amplif?
L3            8 L2 AND DIRECT? (4A) AMPLIF?

=> dup rem l3
PROCESSING COMPLETED FOR L3
L4            8 DUP REM L3 (0 DUPLICATES REMOVED)

=> d l4 bib abs 1-8

L4   ANSWER 1 OF 8  USPATFULL on STN
AN      2004:120515  USPATFULL
TI      Nucleic acid archiving
IN      Gerdes, John C., Denver, CO, UNITED STATES
        Marmaro, Jeffery M., Aurora, CO, UNITED STATES
        Ives, Jeffrey T., Arvada, CO, UNITED STATES
        Roehl, Christopher A., Tampa, FL, UNITED STATES
PI      US 2004091925       A1   20040513
AI      US 2003-690359      A1   20031021 (10)
RLI     Division of Ser. No. US 2001-944604, filed on 31 Aug 2001, PENDING
        Continuation-in-part of Ser. No. US 1998-61757, filed on 16 Apr 1998,
        GRANTED, Pat. No. US 6291166
PRAI    US 1997-41999P      19970416 (60)
DT      Utility
FS      APPLICATION
LREP    HOGAN & HARTSON LLP, ONE TABOR CENTER, SUITE 1500, 1200 SEVENTEENTH ST,
        DENVER, CO, 80202
CLMN    Number of Claims: 9
ECL     Exemplary Claim: 1
DRWN    21 Drawing Page(s)
LN.CNT 1630
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB      This invention provides a kit comprising a substrate having a surface
        coated with a solid phase matrix for nucleic acid manipulation. The
        solid phase matrix exhibits sufficient hydrophilicity and
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electropositivity to tightly bind the nucleic acids in a sample. The manipulations include nucleic acid (double or single stranded DNA and RNA) capture from high volume and/or low concentration specimens, buffer changes, washes, and volume reductions, and enable the interface of solid phase bound nucleic acid with enzyme, hybridization or amplification strategies. The tightly bound nucleic acid may be used, for example, in repeated analyses to confirm results or test additional genes in both research and commercial applications. Further, a method for virus extraction, purification, and solid phase amplification from large volume plasma specimens is described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 2 OF 8 USPATFULL on STN
AN 2003:237907 USPATFULL
TI Compositions and methods for the therapy and diagnosis of colon cancer
IN King, Gordon E., Shoreline, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Secrist, Heather, Seattle, WA, UNITED STATES
Jiang, Yuqiu, Kent, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2003166064 A1 20030904
AI US 2002-99926 A1 20020314 (10)
RLI Continuation-in-part of Ser. No. US 2001-33528, filed on 26 Dec 2001, PENDING Continuation-in-part of Ser. No. US 2001-920300, filed on 31 Jul 2001, PENDING
PRAI US 2001-302051P 20010629 (60)
US 2001-279763P 20010328 (60)
US 2000-223283P 20000803 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 8531
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 3 OF 8 USPATFULL on STN
AN 2003:106233 USPATFULL
TI Compositions and methods for the therapy and diagnosis of pancreatic cancer
IN Benson, Darin R., Seattle, WA, UNITED STATES
Kalos, Michael D., Seattle, WA, UNITED STATES
Lodes, Michael J., Seattle, WA, UNITED STATES
Persing, David H., Redmond, WA, UNITED STATES
Hepler, William T., Seattle, WA, UNITED STATES
Jiang, Yuqiu, Kent, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2003073144 A1 20030417
AI US 2002-60036 A1 20020130 (10)
PRAI US 2001-333626P 20011127 (60)
US 2001-305484P 20010712 (60)
US 2001-265305P 20010130 (60)
US 2001-267568P 20010209 (60)
US 2001-313999P 20010820 (60)

US 2001-291631P 20010516 (60)
US 2001-287112P 20010428 (60)
US 2001-278651P 20010321 (60)
US 2001-265682P 20010131 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 14253
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for the therapy and diagnosis of cancer, particularly pancreatic cancer, are disclosed. Illustrative compositions comprise one or more pancreatic tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly pancreatic cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 4 OF 8 USPATFULL on STN
AN 2002:272801 USPATFULL
TI Compositions and methods for the therapy and diagnosis of colon cancer
IN Stolk, John A., Bothell, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Chenault, Ruth A., Seattle, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2002150922 A1 20021017
AI US 2001-998598 A1 20011116 (9)
PRAI US 2001-304037P 20010710 (60)
US 2001-279670P 20010328 (60)
US 2001-267011P 20010206 (60)
US 2000-252222P 20001120 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 9233
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 5 OF 8 USPATFULL on STN
AN 2002:243056 USPATFULL
TI Nucleic acid archiving
IN Gerdes, John C., Denver, CO, UNITED STATES
Marmaro, Jeffery M., Aurora, CO, UNITED STATES
Ives, Jeffrey T., Arvada, CO, UNITED STATES
Roehl, Christopher A., Tampa, FL, UNITED STATES
PI US 2002132242 A1 20020919
AI US 2001-944604 A1 20010831 (9)
RLI Continuation-in-part of Ser. No. US 1998-61757, filed on 16 Apr 1998,

GRANTED, Pat. No. US 6291166
PRAI US 1997-41999P 19970416 (60)
DT Utility
FS APPLICATION
LREP HOGAN & HARTSON LLP, ONE TABOR CENTER, SUITE 1500, 1200 SEVENTEENTH ST, DENVER, CO, 80202
CLMN Number of Claims: 142
ECL Exemplary Claim: 1
DRWN 21 Drawing Page(s)
LN.CNT 2097
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention is directed to a process for tightly binding nucleic acid to solid phase and corresponding processes for the utilization thereof. Nucleic acid is bound to solid phase matrices exhibiting sufficient hydrophilicity and electropositivity to tightly bind the nucleic acids from a sample. These processes include nucleic acid (double or single stranded DNA and RNA) capture from high volume and/or low concentration specimens, buffer changes, washes, and volume reductions, and enable the interface of solid phase bound nucleic acid with enzyme, hybridization or amplification strategies. The tightly bound nucleic acid may be used, for example, in repeated analyses to confirm results or test additional genes in both research and commercial applications. Further, a method is described for virus extraction, purification, and solid phase amplification from large volume plasma specimens.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 6 OF 8 USPATFULL on STN
AN 2002:243051 USPATFULL
TI Compositions and methods for the therapy and diagnosis of ovarian cancer
IN Algate, Paul A., Issaquah, WA, UNITED STATES
Jones, Robert, Seattle, WA, UNITED STATES
Harlocker, Susan L., Seattle, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2002132237 A1 20020919
AI US 2001-867701 A1 20010529 (9)
PRAI US 2000-207484P 20000526 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 25718
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for the therapy and diagnosis of cancer, particularly ovarian cancer, are disclosed. Illustrative compositions comprise one or more ovarian tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly ovarian cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 7 OF 8 USPATFULL on STN
AN 2002:242791 USPATFULL
TI Compositions and methods for the therapy and diagnosis of colon cancer
IN King, Gordon E., Shoreline, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Secrist, Heather, Seattle, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES (U.S. corporation)
PI US 2002131971 A1 20020919
AI US 2001-33528 A1 20011226 (10)
RLI Continuation-in-part of Ser. No. US 2001-920300, filed on 31 Jul 2001,

PENDING
PRAI US 2001-302051P 20010629 (60)
US 2001-279763P 20010328 (60)
US 2000-223283P 20000803 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 8083
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 8 OF 8 USPATFULL on STN
AN 2000:131592 USPATFULL
TI Detection of nucleic acids and nucleic acid units
IN Graham, Duncan, Edinburgh, United Kingdom
Linacre, Adrian Matthew Thornton, Glasgow, United Kingdom
Munro, Callum Hugh, Pittsburgh, PA, United States
Smith, William Ewan, Glasgow, United Kingdom
Watson, Nigel Dean, Ayrshire, United Kingdom
White, Peter Cyril, Drymen, United Kingdom
PA University of Strathclyde, Glasgow, United Kingdom (non-U.S. corporation)
PI US 6127120 20001003
WO 9705280 19970213
AI US 1998-983486 19980421 (8)
WO 1996-GB1830 19960725
19980421 PCT 371 date
19980421 PCT 102(e) date
PRAI GB 1995-17955 19950725
DT Utility
FS Granted
EXNAM Primary Examiner: Riley, Jezia
LREP Dann, Dorfman, Herrell and Skillman
CLMN Number of Claims: 47
ECL Exemplary Claim: 1
DRWN 22 Drawing Figure(s); 22 Drawing Page(s)
LN.CNT 2282
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to the detection of target nucleic acids or nucleic acid units in a sample, by obtaining a SER(R)S spectrum for a SER(R)S-active complex containing, or derived directly from, the target. The complex includes at least a SER(R)S-active label, and optionally a target binding species containing a nucleic acid or nucleic acid unit. In this detection method, the concentration of the target present in the SER(R)S-active complex, or of the nucleic acid or unit contained in the target binding species in the SER(R)S-active complex, is no higher than 10.sup.-10 moles per liter. Additionally or alternatively, one or more of the following features may be used with the method: i) the introduction of a polyamine; ii) modification of the target, and/or of the nucleic acid or nucleic acid unit contained in the target binding species, in a manner that promotes or facilitates its chemi-sorption onto a SER(R)S-active surface; iii) inclusion of a chemi-sorptive functional group in the SER(R)S-active label. The invention also provides SER(R)S-active complexes for use in such a method, a kit for use in carrying out the method or preparing the complexes and a method

for sequencing a nucleic acid which comprises the use of the detection method to detect at least one target nucleotide or sequence of nucleotides within the acid.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d l4 8 kwic

L4 ANSWER 8 OF 8 USPATFULL on STN

SUMM . . . instance. More preferably it is indirect through a separate linking group--again, appropriate linking groups are known, and these can help **separate** the label from attached **nucleic acids** and nucleic acid units which can potentially (as explained below) interfere with the vital interaction between the label and the. . .

SUMM The surface may be a naked metal or may comprise a **metal oxide** layer on a metal **surface**. It may include an organic coating such as of citrate or of a suitable polymer, such as polylysine or polyphenol,. . .

SUMM . . . generating a PCR product in a sequence dependent manner which precludes the need subsequently to analyse the sequence of the **amplified** fragment. **Direct** analysis of genetic disease by using ARMS to generate linear extension products from genomic DNA, with subsequent detection of the. . .

SUMM . . . invention can also be extended to analysing genotypes both for SNPs and for deleterious mutations. This can be done using **amplified** nucleic acids or, preferably, **directly** on unamplified material. A large number of capture probes for specific regions of the genome can be used to prepare. . .

=>

=> d 19 bib abs 1-27

L9 ANSWER 1 OF 27 USPATFULL on STN
AN 2004:247174 USPATFULL
TI Methods, compositions, and kits for mutation detection in mitochondrial DNA
IN Marino, Michael A., Frederick, MD, UNITED STATES
McAndrew, Patricia, Montgomery Village, MD, UNITED STATES
PA Transgenomic, Inc., San Jose, CA, UNITED STATES (U.S. corporation)
PI US 2004191769 A1 20040930
AI US 2002-202162 A1 20020724 (10)
PRAI US 2002-392911P 20020628 (60)
US 2001-307645P 20010724 (60)
DT Utility
FS APPLICATION
LREP Keith Johnson, Esq., Transgenomic, Inc., 12325 Emmett Street, Omaha, NE, 68164
CLMN Number of Claims: 93
ECL Exemplary Claim: 1
DRWN 7 Drawing Page(s)
LN.CNT 2824
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods, compositions, and kits for detecting mutations in the entire human mitochondrial genome. A preferred method includes amplifying mtDNA from a biological sample by polymerase chain reaction of total DNA using a plurality of pre-selected primer pairs to generate overlapping amplicons; cleaving the amplicons using restriction enzymes to produce fragments suitable for analysis by denaturing high performance liquid chromatography (DHPLC); denaturing and re-annealing the amplicons; and fragment analysis by DHPLC to detect the presence or absence of heteroduplex molecules.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 2 OF 27 USPATFULL on STN
AN 2004:203333 USPATFULL
TI Chemical treatment of biological samples for **nucleic acid extraction** and kits therefor
IN Lou, Jianrong, Mount Airy, MD, UNITED STATES
Collis, Matthew P., Seven Valleys, PA, UNITED STATES
Fort, Thomas L., Finksburg, MD, UNITED STATES
PI US 2004157223 A1 20040812
AI US 2003-419935 A1 20030422 (10)
RLI Continuation-in-part of Ser. No. US 2003-359180, filed on 6 Feb 2003, PENDING
DT Utility
FS APPLICATION
LREP PATTON BOGGS LLP, 8484 WESTPARK DRIVE, SUITE 900, MCLEAN, VA, 22102
CLMN Number of Claims: 37
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 714
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A composition and method for the purification of nucleic acid are disclosed. The composition includes at least one alkaline agent and at least one detergent. The composition preferably also includes a suspension of paramagnetic particles and an acidic solution. The method involves the use of the composition with paramagnetic particles to **extract nucleic acid** from a biological sample.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 3 OF 27 USPATFULL on STN
AN 2004:203330 USPATFULL
TI Chemical treatment of biological samples for **nucleic acid extraction** and kits therefor

IN Lou, Jianrong, Mount Airy, MD, UNITED STATES
Collis, Matthew P., Seven Valleys, PA, UNITED STATES
Fort, Thomas L., Finksburg, MD, UNITED STATES
PI US 2004157219 A1 20040812
AI US 2003-359180 A1 20030206 (10)
DT Utility
FS APPLICATION
LREP Laura D. Nammo, Patton Boggs LLP, 9th Floor, 8484 Westpark Drive, McLean, VA, 22102
CLMN Number of Claims: 33
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 623
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A composition and method for the purification of nucleic acid are disclosed. The composition includes at least one alkaline agent and at least one detergent. The composition preferably also includes a suspension of paramagnetic particles and an acidic solution. The method involves the use of the composition with paramagnetic particles to **extract nucleic acid** from a biological sample.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 4 OF 27 USPATFULL on STN
AN 2004:165414 USPATFULL
TI Magnetic carrier for biological substance, production method thereof and isolation method of biological substance using same
IN Nishiya, Yoshiaki, Osaka, JAPAN
Tsuboi, Satoko, Otokuni-gun, JAPAN
Kishimoto, Mikio, Moriya-shi, JAPAN
PA Toyo Boseki Kabushiki Kaisha, Osaka, JAPAN (non-U.S. corporation)
Hitachi Maxell, Ltd., Osaka, JAPAN (non-U.S. corporation)
PI US 2004126902 A1 20040701
AI US 2003-607916 A1 20030627 (10)
PRAI JP 2002-188140 20020627
JP 2002-230533 20020807
JP 2002-267170 20020912
DT Utility
FS APPLICATION
LREP LEYDIG VOIT & MAYER, LTD, TWO PRUDENTIAL PLAZA, SUITE 4900, 180 NORTH STETSON AVENUE, CHICAGO, IL, 60601-6780
CLMN Number of Claims: 24
ECL Exemplary Claim: 1
DRWN 4 Drawing Page(s)
LN.CNT 2350
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention mainly provides a magnetic carrier for biological substance, which shows improved dispersibility in aqueous solutions and is superior in the collectability by the magnetic field, reversible binding ability with a biological substance, elution property of the bound biological substance, and isolation and purification efficiency of biological substance, as compared to conventional magnetic carriers. The magnetic carrier of the present invention includes a magnetic carrier having a saturation magnetization of 10-80 A.multidot.m.sup.2/kg and a coercive force of 0.80-15.92 kA/m, a magnetic carrier wherein a ferromagnetic iron oxide particle is coated with a compound comprising silicon and aluminum, and the like.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 5 OF 27 USPATFULL on STN
AN 2004:114194 USPATFULL
TI Integrated microfluidic array device
IN Schembri, Carol T., San Mateo, CA, UNITED STATES
PI US 2004087033 A1 20040506
AI US 2002-286089 A1 20021031 (10)
DT Utility

FS APPLICATION
LREP AGILENT TECHNOLOGIES, INC., Legal Department, DL429, Intellectual Property Administration, P.O. Box 7599, Loveland, CO, 80537-0599
CLMN Number of Claims: 32
ECL Exemplary Claim: 1
DRWN 8 Drawing Page(s)
LN.CNT 3447
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A microfluidic component having a microfluidic channel is joined to an array component having a flexible array substrate. In an embodiment, the array component includes a prefabricated flexible array that couples with the microfluidic component in modular fashion. The modular architecture provides for different combinations of microfluidic components and array components that can be used to create customized processing and analysis tools.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 6 OF 27 USPATFULL on STN
AN 2004:114170 USPATFULL
TI Array substrates having protective layer
IN Schembri, Carol T., San Mateo, CA, UNITED STATES
PI US 2004087009 A1 20040506
AI US 2002-286090 A1 20021031 (10)
DT Utility
FS APPLICATION
LREP AGILENT TECHNOLOGIES, INC., Legal Department, DL429, Intellectual Property Administration, P.O. Box 7599, Loveland, CO, 80537-0599
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 9 Drawing Page(s)
LN.CNT 3388
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Array substrates that have protective layer that includes a metal oxide layer are resistant to the conditions to which the array substrates are exposed, e.g. during their manufacture and/or use. In an embodiments, the array substrates include a reflective layer comprising a metal layer, and the protective layer of metal oxide is typically supported on the metal layer. The metal oxide layer may, in particular embodiments, include the oxide of the metal used in the reflective layer. Chromium, aluminum, titanium, and tantalum are metals of choice for the metal layer, although other metals may be used. The protective layer typically includes oxides of chromium, aluminum, titanium, or tantalum. Methods of forming the substrate using sputtering, evaporation, chemical vapor deposition, or plasma-enhanced chemical vapor deposition are taught.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 7 OF 27 USPATFULL on STN
AN 2004:114169 USPATFULL
TI Composite flexible array substrate having flexible support
IN Schembri, Carol T., San Mateo, CA, UNITED STATES
PI US 2004087008 A1 20040506
AI US 2002-285759 A1 20021031 (10)
DT Utility
FS APPLICATION
LREP AGILENT TECHNOLOGIES, INC., Legal Department, DL429, Intellectual Property Administration, P.O. Box 7599, Loveland, CO, 80537-0599
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 8 Drawing Page(s)
LN.CNT 3382
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Flexible array substrates having a flexible support, a flexible base, a reflective layer, and a transparent layer, in that order, are taught. Methods of forming the flexible array substrates, devices incorporating flexible array substrates, and arrays having probes arranged on a surface of the flexible array substrate are also taught.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 8 OF 27 USPATFULL on STN
AN 2004:114032 USPATFULL
TI Test strips including flexible array substrates and method of hybridization
IN Schembri, Carol T., San Mateo, CA, UNITED STATES
PI US 2004086871 A1 20040506
AI US 2002-286117 A1 20021031 (10)
DT Utility
FS APPLICATION
LREP AGILENT TECHNOLOGIES, INC., Legal Department, DL429, Intellectual Property Administration, P.O. Box 7599, Loveland, CO, 80537-0599
CLMN Number of Claims: 21
ECL Exemplary Claim: 1
DRWN 8 Drawing Page(s)
LN.CNT 3392
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Individual and aggregate test strip arrays having a backing strip supporting a flexible array substrate which supports an addressable collection of probes are taught. Hybridization cells for use with the individual test strip arrays are also disclosed, and in particular embodiments the hybridization cells closely fit a portion or all of the individual test strip arrays. Array hybridization systems that include test strip arrays and hybridization cells are disclosed with methods for performing a hybridization assay on a sample solution.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 9 OF 27 USPATFULL on STN
AN 2004:114030 USPATFULL
TI Device having multiple molecular arrays
IN Schembri, Carol T., San Mateo, CA, UNITED STATES
PI US 2004086869 A1 20040506
AI US 2002-285756 A1 20021031 (10)
DT Utility
FS APPLICATION
LREP AGILENT TECHNOLOGIES, INC., Legal Department, DL429, Intellectual Property Administration, P.O. Box 7599, Loveland, CO, 80537-0599
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 9 Drawing Page(s)
LN.CNT 3400
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A device having multiple individual pieces of flexible array substrate (a "multi-array device") has a foundation structure with a plurality of array sites and a plurality of individual pieces of flexible array substrate occupying each array site on the foundation structure. In an embodiment the foundation structure has a pedestal supporting a plurality of prongs arranged in an x-y grid layout. Each prong has an array site with an individual piece of flexible array substrate attached thereto. The foundation structure is adapted to mate with a multi-well plate, such as a 96-well microtiter plate, with each individual piece of flexible array substrate being disposed in a well of the plate. Kits containing the multi-array devices and methods of using the multi-array devices for performing multiple hybridization reactions in parallel are taught.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 10 OF 27 USPATFULL on STN
AN 2004:113587 USPATFULL
TI Device with integrated microfluidic and electronic components
IN Schembri, Carol T., San Mateo, CA, UNITED STATES
PI US 2004086424 A1 20040506
AI US 2002-286319 A1 20021031 (10)
DT Utility

FS APPLICATION
LREP AGILENT TECHNOLOGIES, INC., Legal Department, DL429, Intellectual Property Administration, P.O. Box 7599, Loveland, CO, 80537-0599
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 8 Drawing Page(s)
LN.CNT 3399
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Devices having microfluidic features and arrays joined to electronics components are described. In an embodiment, the array includes a flexible array substrate. The electronics components have circuitry that may e.g. detect reactions or control conditions on the device via a feedback loop. Modular architecture provides for different combinations of microfluidic components, array components, and/or electronics components that can be used to create customized processing and analysis tools.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 11 OF 27 USPATFULL on STN
AN 2004:94787 USPATFULL
TI Method for controlling the microbiological quality of an aqueous medium and kit therefor
IN Renaud, Patricia, Le Pecq, FRANCE
Guillot, Emmanuelle, Saint Germain En Laye, FRANCE
Mabilat, Claude, Saint Germain Au Mont D'or, FRANCE
Vachon, Carole, Villeurbanne, FRANCE
Lacroix, Bruno, Saint Genis Laval, FRANCE
Vernet, Guy, Albigny Sur Saone, FRANCE
Charvieu, Marie-Astrid, Charvagneux, FRANCE
Laffaire, Philippe, Tignieu Jameyzieu, FRANCE
PI US 2004072239 A1 20040415
AI US 2003-332123 A1 20030924 (10)
WO 2001-FR2191 20010706
PRAI FR 2000-8839 20000706
DT Utility
FS APPLICATION
LREP Oliff & Berridge, P O Box 19928, Alexandria, VA, 22320
CLMN Number of Claims: 67
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 2784
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention concerns a method for controlling the microbiological quality of an environmental aqueous medium, suspected of containing various micro-organisms, comprising the following steps: selecting a reference set, consisting of at least three micro-organisms, representing jointly or separately, a microbiological quality level; providing a microbiological detection kit, consisting of at least three probes specifically and respectively identifying said three micro-organisms; after treating the medium to be analysed, contacting said micro-organisms, or any fraction thereof derived from the medium to be analysed therefrom, with said detection kit, whereby a multiple determination of said micro-organisms is carried out, said determination representing the microbiological quality level of the medium. The invention also concerns an appropriate microbiological detection kit for implementing said method.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 12 OF 27 USPATFULL on STN
AN 2004:50389 USPATFULL
TI Isolation and use of solid tumor stem cells
IN Clarke, Michael F., Ann Arbor, MI, UNITED STATES
Morrison, Sean J., Ann Arbor, MI, UNITED STATES
Wicha, Max S., Ann Arbor, MI, UNITED STATES
Al-Hajj, Muhammad, Ann Arbor, MI, UNITED STATES
PI US 2004037815 A1 20040226

AI US 2003-343692 A1 20030825 (10)
WO 2001-US24243 20010802
DT Utility
FS APPLICATION
LREP David A. Casimir, MEDLEN & CARROLL LLP, 101 Howard Street Suite 350, San Francisco, CA, 94105
CLMN Number of Claims: 449
ECL Exemplary Claim: 1
DRWN 26 Drawing Page(s)
LN.CNT 5610
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A small percentage of cells within an established solid tumor have the properties of stem cells. These solid tumor stem cells give rise both to more tumor stem cells and to the majority of cells in the tumor that have lost the capacity for extensive proliferation and the ability to give rise to new tumors. Thus, solid tumor heterogeneity reflects the presence of tumor cell progeny arising from a solid tumor stem cell. We have developed a xenograft model in which we have been able to establish tumors from primary tumors via injection of tumors in the mammary gland of severely immunodeficient mice. These xenograft assay have allowed us to do biological and molecular assays to characterize clonogenic solid tumor stem cells. We have also developed evidence that strongly implicates the Notch pathway, especially Notch 4, as playing a central pathway in carcinogenesis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 13 OF 27 USPATFULL on STN
AN 2004:48377 USPATFULL
TI Methods, systems, and kits for analysis of polynucleotides
IN Legendre, Benjamin L., JR., Omaha, NE, UNITED STATES
Rudolph, Joseph G., III, Silver Spring, MD, UNITED STATES
Marino, Michael A., Frederick, MD, UNITED STATES
PA Transgenomic, Inc., San Jose, CA (U.S. corporation)
PI US 2004035793 A1 20040226
AI US 2002-288406 A1 20021104 (10)
PRAI US 2001-338627P 20011105 (60)
US 2001-338041P 20011204 (60)
US 2002-370749P 20020405 (60)
DT Utility
FS APPLICATION
LREP KEITH JOHNSON, ESQ., TRANSGENOMIC, INC., 12325 EMMETT STREET, OMAHA, NE, 68164
CLMN Number of Claims: 68
ECL Exemplary Claim: 1
DRWN 8 Drawing Page(s)
LN.CNT 1795
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods, systems, compositions and kits for improved detection of polynucleotides. In one aspect, there is provided a method for separating polynucleotides (such as DNA or RNA) using a liquid chromatographic separation device (such as a reverse phase column or an ion exchange column), contacting eluted polynucleotides with intercalating dye, and detecting (such as by fluorescence detection) dye bound to the eluted polynucleotides. The invention preferably uses a post-column reactor, such as a mixing tee, downstream of the separation column. Sensitivity of mutation detection by denaturing high performance liquid chromatography (DHPLC) is enhanced.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 14 OF 27 USPATFULL on STN
AN 2003:324642 USPATFULL
TI Method for predicting autoimmune diseases
IN Aune, Thomas M., Franklin, TN, UNITED STATES
Olsen, Nancy J., Nashville, TN, UNITED STATES
PA Vanderbilt University (U.S. corporation)
PI US 2003228617 A1 20031211

AI US 2003-439388 A1 20030516 (10)
PRAI US 2002-381055P 20020516 (60)
DT Utility
FS APPLICATION
LREP JENKINS & WILSON, PA, 3100 TOWER BLVD, SUITE 1400, DURHAM, NC, 27707
CLMN Number of Claims: 47
ECL Exemplary Claim: 1
DRWN 4 Drawing Page(s)
LN.CNT 4906
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The presently claimed subject matter provides a method for detecting an autoimmune disorder in a subject by obtaining a biological sample from the subject; determining expression levels of at least two genes in the biological sample; and comparing the expression level of each gene with a standard, wherein the comparing detects the presence of an autoimmune disorder in the subject. Also provided are compositions and kits for carrying out the methods of the presently claimed subject matter.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 15 OF 27 USPATFULL on STN
AN 2003:319512 USPATFULL
TI Methods and compositions for mutation analysis of polynucleotides by liquid chromatography
IN Taylor, Paul D., Gilroy, CA, UNITED STATES
Nguyen, Liem T., San Jose, CA, UNITED STATES
PA Transgenomic, Inc., San Jose, CA (U.S. corporation)
PI US 2003225261 A1 20031204
AI US 2002-266906 A1 20021007 (10)
PRAI US 2001-327613P 20011005 (60)
US 2001-335478P 20011101 (60)
DT Utility
FS APPLICATION
LREP Keith Johnson, Esq., Transgenomic, Inc., 12325 Emmett Street, Omaha, NE, 68164
CLMN Number of Claims: 63
ECL Exemplary Claim: 1
DRWN 9 Drawing Page(s)
LN.CNT 2343
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods, compositions, and kits for separating heteroduplex and homoduplex DNA molecules in a test mixture by temperature-compression denaturing high performance liquid chromatography (tcDHPLC). The method includes use of nitrogen-containing additives in the mobile phase that allow detection of diverse heteroduplex molecules to be performed at the same pre-selected temperature. An example of a preferred additive is betaine. Standard mixtures of DNA fragments, such as mutation standards containing known heteroduplex and homoduplex molecules, can be used to select the concentration of additive and temperature. Compositions and kits including the mobile phase, mutation standards, PCR primers, separation media, and DNA polymerase are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 16 OF 27 USPATFULL on STN
AN 2003:258639 USPATFULL
TI 207 human secreted proteins
IN Ni, Jian, Germantown, MD, UNITED STATES
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
LaFleur, David W., Washington, DC, UNITED STATES
Moore, Paul A., Germantown, MD, UNITED STATES
Olsen, Henrik S., Gaithersburg, MD, UNITED STATES
Rosen, Craig A., Laytonsville, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
Soppet, Daniel R., Centreville, VA, UNITED STATES
Young, Paul E., Gaithersburg, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Florence, Kimberly A., Rockville, MD, UNITED STATES

Wei, Ying-Fei, Berkeley, CA, UNITED STATES
Florence, Charles, Rockville, MD, UNITED STATES
Hu, Jing-Shan, Mountain View, CA, UNITED STATES
Li, Yi, Sunnyvale, CA, UNITED STATES
Kyaw, Hla, Frederick, MD, UNITED STATES
Fischer, Carrie L., Burke, VA, UNITED STATES
Ferrie, Ann M., Painted Post, NY, UNITED STATES
Fan, Ping, Potomac, MD, UNITED STATES
Feng, Ping, Gaithersburg, MD, UNITED STATES
Endress, Gregory A., Florence, MA, UNITED STATES
Dillon, Patrick J., Carlsbad, CA, UNITED STATES
Carter, Kenneth C., North Potomac, MD, UNITED STATES
Brewer, Laurie A., St. Paul, MN, UNITED STATES
Yu, Guo-Liang, Berkeley, CA, UNITED STATES
Zeng, Zhizhen, Lansdale, PA, UNITED STATES
Greene, John M., Gaithersburg, MD, UNITED STATES
PI US 2003181692 A1 20030925
AI US 2001-933767 A1 20010822 (9)
RLI Continuation-in-part of Ser. No. WO 2001-US5614, filed on 21 Feb 2001, PENDING Continuation-in-part of Ser. No. US 1998-205258, filed on 4 Dec 1998, PENDING
PRAI US 2000-184836P 20000224 (60)
US 2000-193170P 20000329 (60)
US 1997-48885P 19970606 (60)
US 1997-49375P 19970606 (60)
US 1997-48881P 19970606 (60)
US 1997-48880P 19970606 (60)
US 1997-48896P 19970606 (60)
US 1997-49020P 19970606 (60)
US 1997-48876P 19970606 (60)
US 1997-48895P 19970606 (60)
US 1997-48884P 19970606 (60)
US 1997-48894P 19970606 (60)
US 1997-48971P 19970606 (60)
US 1997-48964P 19970606 (60)
US 1997-48882P 19970606 (60)
US 1997-48899P 19970606 (60)
US 1997-48893P 19970606 (60)
US 1997-48900P 19970606 (60)
US 1997-48901P 19970606 (60)
US 1997-48892P 19970606 (60)
US 1997-48915P 19970606 (60)
US 1997-49019P 19970606 (60)
US 1997-48970P 19970606 (60)
US 1997-48972P 19970606 (60)
US 1997-48916P 19970606 (60)
US 1997-49373P 19970606 (60)
US 1997-48875P 19970606 (60)
US 1997-49374P 19970606 (60)
US 1997-48917P 19970606 (60)
US 1997-48949P 19970606 (60)
US 1997-48974P 19970606 (60)
US 1997-48883P 19970606 (60)
US 1997-48897P 19970606 (60)
US 1997-48898P 19970606 (60)
US 1997-48962P 19970606 (60)
US 1997-48963P 19970606 (60)
US 1997-48877P 19970606 (60)
US 1997-48878P 19970606 (60)
US 1997-57645P 19970905 (60)
US 1997-57642P 19970905 (60)
US 1997-57668P 19970905 (60)
US 1997-57635P 19970905 (60)
US 1997-57627P 19970905 (60)
US 1997-57667P 19970905 (60)
US 1997-57666P 19970905 (60)
US 1997-57764P 19970905 (60)
US 1997-57643P 19970905 (60)

US 1997-57769P 19970905 (60)
US 1997-57763P 19970905 (60)
US 1997-57650P 19970905 (60)
US 1997-57584P 19970905 (60)
US 1997-57647P 19970905 (60)
US 1997-57661P 19970905 (60)
US 1997-57662P 19970905 (60)
US 1997-57646P 19970905 (60)
US 1997-57654P 19970905 (60)
US 1997-57651P 19970905 (60)
US 1997-57644P 19970905 (60)
US 1997-57765P 19970905 (60)
US 1997-57762P 19970905 (60)
US 1997-57775P 19970905 (60)
US 1997-57648P 19970905 (60)
US 1997-57774P 19970905 (60)
US 1997-57649P 19970905 (60)
US 1997-57770P 19970905 (60)
US 1997-57771P 19970905 (60)
US 1997-57761P 19970905 (60)
US 1997-57760P 19970905 (60)
US 1997-57776P 19970905 (60)
US 1997-57778P 19970905 (60)
US 1997-57629P 19970905 (60)
US 1997-57628P 19970905 (60)
US 1997-57777P 19970905 (60)
US 1997-57634P 19970905 (60)
US 1997-70923P 19971218 (60)
US 1998-92921P 19980715 (60)
US 1998-94657P 19980730 (60)
US 1997-70923P 19971218 (60)
US 1998-92921P 19980715 (60)
US 1998-94657P 19980730 (60)
DT Utility
FS APPLICATION
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN 10 Drawing Page(s)
LN.CNT 32746
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 17 OF 27 USPATFULL on STN
AN 2003:237784 USPATFULL
TI System and method for automated matched ion polynucleotide chromatography
IN Gjerde, Douglas T., Saratoga, CA, UNITED STATES
Taylor, Paul D., Gilroy, CA, UNITED STATES
Hanna, Christopher P., San Francisco, CA, UNITED STATES
PA Transgenomic, Inc., San Jose, CA, UNITED STATES (U.S. corporation)
PI US 2003165941 A1 20030904
AI US 2002-308576 A1 20021202 (10)
RLI Continuation of Ser. No. US 1999-469551, filed on 22 Dec 1999, ABANDONED Continuation-in-part of Ser. No. US 1999-457125, filed on 7 Dec 1999, ABANDONED Continuation-in-part of Ser. No. US 1998-129105, filed on 4 Aug 1998, GRANTED, Pat. No. US 6287822
DT Utility
FS APPLICATION
LREP Licata & Tyrrell P.C., 66 E. Main Street, Marlton, NJ, 08053

CLMN Number of Claims: 40
ECL Exemplary Claim: 1
DRWN 35 Drawing Page(s)
LN.CNT 4370
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB In an extensive Matched Ion Polynucleotide Chromatography (MIPC) system and method, and the computer programs or software associated therewith, the system provides automated options for sample selection, mobile phase gradient selection and control, column and mobile phase temperature control, and fragment collection for a wide variety of MIPC separation processes. MIPC separation processes can be applied to effect size-based separation of DNA fragments, mutation detection, DNA fragment purification, PCR process monitoring and other novel processes. This invention is directed to the system and software which automates many of these procedures, facilitating use of the system to achieve complex separation methods. In one embodiment of the invention, a user specifies a size range of double stranded DNA fragment(s) in a mixture, the software calculates a solvent gradient to elute the fragment(s), and the system performs the chromatographic separation using the calculated gradient. In an embodiment useful in DNA mutation detection, a user specifies the base sequence of a wild type DNA molecule, the software calculates a temperature for partially denaturing heteroduplex and homoduplex molecules of the DNA in a mixture, the software calculates a solvent gradient to elute the fragments, and the system performs the chromatographic separation using the calculated gradient and temperature.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 18 OF 27 USPATFULL on STN
AN 2003:207213 USPATFULL
TI Infectious disease microarray
IN Sharp, Nicholas J.H., Vancouver, CANADA
Schatzberg, Scott J., Ithica, NY, UNITED STATES
OBrian, Gregory Robert, Raleigh, NC, UNITED STATES
PA North Carolina State University, Raleigh, NC, UNITED STATES (non-U.S. corporation)
PI US 2003143571 A1 20030731
AI US 2002-215314 A1 20020808 (10)
PRAI US 2001-310985P 20010808 (60)
DT Utility
FS APPLICATION
LREP JENKINS & WILSON, PA, 3100 TOWER BLVD, SUITE 1400, DURHAM, NC, 27707
CLMN Number of Claims: 51
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 2697
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method for detecting one or more pathogens in a subject. The method includes the steps of: (a) procuring a biological sample, wherein the biological sample comprises nucleic acid material; (b) amplifying the nucleic acid material using random primers to produce a set of random amplicons; (c) providing one or more pathogen-specific probes or probe sets; (d) hybridizing the set of random amplicons with the one or more pathogen-specific probes or probe sets; and (e) determining selective hybridization between a random amplicon and a pathogen-specific probe or probe set, whereby the presence of a pathogen in a biological sample is detected.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 19 OF 27 USPATFULL on STN
AN 2003:141145 USPATFULL
TI Nucleic acid-bondable magnetic carrier and method for isolating nucleic acid using the same
IN Uematsu, Hiroaki, Ohtsu-shi, JAPAN
Daimon, Katsuya, Ohtsu-shi, JAPAN
Yoshiga, Satoko, Ohtsu-shi, JAPAN

PA Toyo Boseki Kabushiki Kaisha (non-U.S. corporation)
PI US 2003096987 A1 20030522
AI US 2002-202212 A1 20020722 (10)
RLI Continuation of Ser. No. US 1999-273312, filed on 19 Mar 1999, ABANDONED Division of Ser. No. US 1996-676982, filed on 8 Jul 1996, GRANTED, Pat. No. US 5945525
PRAI JP 1995-172481 19950707
DT Utility
FS APPLICATION
LREP FISH & NEAVE, 1251 AVENUE OF THE AMERICAS, 50TH FLOOR, NEW YORK, NY, 10020-1105
CLMN Number of Claims: 15
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 840
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A nucleic acid-bondable magnetic carrier of the present invention is a magnetic silica particle comprising a superparamagnetic metal oxide, wherein the magnetic silica particle has a specific surface of about 100 to about 800 m.sup.2/g.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 20 OF 27 USPATFULL on STN
AN 2002:221424 USPATFULL
TI Isolation and use of solid tumor stem cells
IN Clarke, Michael F., Ann Arbor, MI, UNITED STATES
Morrison, Sean J., Ann Arbor, MI, UNITED STATES
Wicha, Max S., Ann Arbor, MI, UNITED STATES
Al-Hajj, Muhammad, Ann Arbor, MI, UNITED STATES
PA Regents of the University of Michigan, Ann Arbor, MI, UNITED STATES, 48109-1280 (U.S. corporation)
PI US 2002119565 A1 20020829
AI US 2001-920517 A1 20010801 (9)
PRAI US 2000-222794P 20000803 (60)
US 2000-240317P 20001013 (60)
DT Utility
FS APPLICATION
LREP John Prince, McDermott, Will & Emery, 28 State Street, Boston, MA, 02109-1775
CLMN Number of Claims: 185
ECL Exemplary Claim: 1
DRWN 22 Drawing Page(s)
LN.CNT 4837
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A small percentage of cells within an established solid tumor have the properties of stem cells. These solid tumor stem cells give rise both to more tumor stem cells and to the majority of cells in the tumor that have lost the capacity for extensive proliferation and the ability to give rise to new tumors. Thus, solid tumor heterogeneity reflects the presence of tumor cell progeny arising from a solid tumor stem cell. This discovery is the basis for solid tumor stem cell compositions, methods for distinguishing functionally different populations of tumor cells, methods for using these tumor cell populations for studying the effects of therapeutic agents on tumor growth, and methods for identifying and testing novel anti-cancer therapies directed to solid tumor stem cells.

We have developed a xenograft model in which we have been able to establish tumors from primary tumors via injection of tumors in the mammary gland of severely immunodeficient mice. Xenograft tumors have been established from mastectomy specimens of breast cancer patients. Furthermore, in the three tumors that we have tested, we have been able to make single-cell suspensions and transfer the tumors serially through immunocompromised mice. These improvements in the xenograft assay have allowed us to do biological and molecular assays to characterize clonogenic solid tumor stem cells.

We have also developed evidence that strongly implicates the Notch pathway, especially Notch 4, as playing a central pathway in carcinogenesis. Antibodies against Notch4 reduced tumor cell proliferation and survival.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 21 OF 27 USPATFULL on STN
AN 2002:133962 USPATFULL
TI Nucleic acid isolation method & kit
IN Gundling, Gerard, Lake Forest, IL, UNITED STATES
PI US 2002068821 A1 20020606
AI US 1999-470944 A1 19991222 (9)
DT Utility
FS APPLICATION
LREP ABBOTT LABORATORIES, DEPT. 377 - AP6D-2, 100 ABBOTT PARK ROAD, ABBOTT PARK, IL, 60064-6050
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 930
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Provided herein is a method for **separating nucleic acid** from a test sample comprising the steps of contacting a test sample with a **metal oxide support** material and a binding **buffer** to form **nucleic acid/metal oxide support** material complexes, **separating** the complexes from the test sample; and eluting the nucleic acid from the **metal oxide support** material.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 22 OF 27 USPATFULL on STN
AN 2002:12244 USPATFULL
TI Compositions and methods for array-based genomic nucleic acid analysis of biological molecules
IN Bradley, Allan, Cambridge, UNITED KINGDOM
Cai, Wei-Wen, Pearland, TX, UNITED STATES
Marathi, Upendra, Houston, TX, UNITED STATES
PI US 2002006623 A1 20020117
AI US 2001-853343 A1 20010510 (9)
RLI Continuation-in-part of Ser. No. US 2000-546085, filed on 10 Apr 2000, PENDING Continuation-in-part of Ser. No. US 1998-71876, filed on 4 May 1998, GRANTED, Pat. No. US 6048695
DT Utility
FS APPLICATION
LREP GREGORY P. EINHORN, Fish & Richardson P.C., Suite 500, 4350 La Jolla Village, San Diego, CA, 92122
CLMN Number of Claims: 83
ECL Exemplary Claim: 1
DRWN 7 Drawing Page(s)
LN.CNT 1865
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides biological molecules modified by reaction with a compound having the formula: R.sub.1--X--R.sub.2, wherein R.sub.1 is a cyclic ether group or an amino group, R.sub.2 is an alkoxysilane group and X is a moiety chemically suitable for linking the cyclic ether group or the amino group to the alkoxysilane group. The invention also provides arrays, or "biochips," comprising these modified biological molecules. Also provided are methods for making and using these compositions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 23 OF 27 USPATFULL on STN
AN 2001:208651 USPATFULL
TI Methods for attaching substances to surfaces

IN Fulcrand, Geraldine, Sunnyvale, CA, United States
Dellinger, Douglas J., Sunnyvale, CA, United States
Lefkowitz, Steven M., Millbrae, CA, United States
PA Agilent Technologies, Inc., Palo Alto, CA, United States (U.S. corporation)
PI US 6319674 B1 20011120
AI US 1999-397527 19990916 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Houtteman, Scott W.
CLMN Number of Claims: 28
ECL Exemplary Claim: 1
DRWN 12 Drawing Figure(s); 12 Drawing Page(s)
LN.CNT 2109
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods are disclosed for immobilizing a substance to a surface. A surface is employed that comprises a linking group consisting of a first portion comprising a hydrocarbon chain, optionally substituted, and a second portion comprising an alkylene oxide or an alkylene imine wherein the alkylene is optionally substituted. One end of the first portion is attached to the surface and one end of the second portion is attached to the other end of the first portion chain by means of an amine or an oxy functionality. The second portion terminates in an amine or a hydroxy functionality. The surface is reacted with the substance to be immobilized under conditions for attachment of the substance to the surface by means of the linking group. Compositions of matter and reaction systems are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 24 OF 27 USPATFULL on STN
AN 2001:176393 USPATFULL
TI "SELF - ENCODING SENSOR WITH MICROSPHERES "
IN WALT, DAVID R., LEXINGTON, MA, United States
DICKINSON, TODD A., SAN DIEGO, CA, United States
PI US 2001029049 A1 20011011
AI US 1999-287573 A1 19990406 (9)
DT Utility
FS APPLICATION
LREP ROBIN M SILVA, FLEHR HOHBACH TEST ALBRITTON & HERBERT, SUITE 3400, FOUR EMBARCADERO CENTER, SAN FRANCISCO, CA, 94111
CLMN Number of Claims: 26
ECL Exemplary Claim: 1
DRWN 26 Drawing Page(s)
LN.CNT 3105
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A microsphere-based analytic chemistry system is disclosed in which self-encoding microspheres having distinct characteristic optical response signatures to specific target analytes may be mixed together while the ability is retained to identify the sensor type and location of each sensor in a random dispersion of large numbers of such sensors in a sensor array using an optically interrogatable encoding scheme. An optical fiber bundle sensor is also disclosed in which individual microsphere sensors are disposed in microwells at a distal end of the fiber bundle and are optically coupled to discrete fibers or groups of fibers within the bundle. The identities of the individual sensors in the array are self-encoded by exposing the array to a reference analyte while illuminating the array with excitation light energy. A single sensor array may carry thousands of discrete sensing elements whose combined signal provides for substantial improvements in sensor detection limits, response times and signal-to-noise ratios.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 25 OF 27 USPATFULL on STN
AN 2001:1881 USPATFULL
TI High surface density covalent immobilization of oligonucleotide monolayers using a 1-(thiotrifluoroacetato)-11-(trichlorososilyl)-

undecane linker
IN Thompson, Michael, 182 Moore Avenue, Toronto, Ontario, Canada M4T 1V8
McGovern, Mark E., 25 Clearside Place, Etobicoke, Ontario, Canada M9R 2G7
PI US 6169194 B1 20010102
AI US 1997-951448 19971016 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Ceperley, Mary E.
LREP Ridout & Maybee
CLMN Number of Claims: 1
ECL Exemplary Claim: 1
DRWN 6 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 1371
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Oligonucleotides and other biomolecules are immobilized in high density on solid substrates through covalent forces using either a permanent thioether bond, or a chemoselectively reversible disulfide bond to a surface thiol. Substrates which have hydroxyl groups on their surfaces can be first silanized with a trichlorosilane containing 2-20 carbon atoms in its hydrocarbon backbone, terminating in a protected thiol group. The oligonucleotides or other biomolecules are first connected to a tether consisting of a hydrocarbon or polyether chain of 2-20 units in length which terminates in a thiol group. This thiol may be further modified with a halobenzylic-bifunctional water soluble reagent which allows the conjugate to be immobilized onto the surface thiol group by a permanent thioether bond. Alternatively, the oligonucleotide-tether-thiol group can be converted to a pyridyldisulfide functionality which attaches to the surface thiol by a chemoselectively reversible disulfide bond. The permanently bound oligonucleotides are immobilized in high density compared to other types of thiol functionalized silane surfaces and to the avidin-biotin method.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 26 OF 27 USPATFULL on STN
AN 2000:167743 USPATFULL
TI High surface density covalent immobilization of oligonucleotide monolayers
IN McGovern, Mark, 25 Clearside Place, Etobicoke, Canada M9R 2G7
Thompson, Michael, 170 College Street, Toronto, Canada M5S 3E3
PI US 6159695 20001212
AI US 1999-301287 19990428 (9)
RLI Continuation-in-part of Ser. No. US 1997-951448, filed on 16 Oct 1997
DT Utility
FS Granted
EXNAM Primary Examiner: Brusca, John S.; Assistant Examiner: Lundgren, Jeffrey S
LREP Ridout & Maybee
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN 10 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 1622
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Oligonucleotides and other biomolecules are immobilized in high density on solid substrates through covalent forces using either a permanent thioether bond, or a chemoselectively reversible disulfide bond to a surface thiol. Substrates which have hydroxyl groups on their surfaces can be first silanized with a trichlorosilane containing 2-20 carbon atoms in its hydrocarbon backbone, terminating in a protected thiol group. The oligonucleotides or other biomolecules are first connected to a tether consisting of a hydrocarbon or polyether chain of 2-20 units in length which terminates in a thiol group. This thiol may be further modified with a halobenzylic-bifunctional water soluble reagent which allows the conjugate to be immobilized onto the surface thiol group by a permanent thioether bond. Alternatively, the oligonucleotide-tether-thiol group can be converted to a pyridyldisulfide functionality which attaches to the surface thiol by a chemoselectively reversible disulfide

bond. The permanently bound oligonucleotides are immobilized in high density compared to other types of thiol functionalized silane surface and to the avidin-biotin method.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 27 OF 27 USPATFULL on STN
AN 1999:102914 USPATFULL
TI Method for isolating nucleic acids using silica-coated magnetic particles
IN Uematsu, Hiroaki, Ohtsu, Japan
Daimon, Katsuya, Ohtsu, Japan
Yoshiga, Satoko, Ohtsu, Japan
PA Toyo Boseki Kabushiki Kaisha, Osaka, Japan (non-U.S. corporation)
PI US 5945525 19990831
AI US 1996-676982 19960708 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Kunz, Gary L.
LREP Fish & Neave
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 835
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A nucleic acid-bondable magnetic carrier of the present invention is a magnetic silica particle comprising a superparamagnetic metal oxide, wherein the magnetic silica particle has a specific surface of about 100 to about 800 m.sup.2 /g.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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=> d his

     (FILE 'HOME' ENTERED AT 11:42:20 ON 16 MAR 2005)

     FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 11:42:57 ON
     16 MAR 2005
L1         20162 S (SEPARAT? OR EXTRACT?)(5A) NUCLEIC ACID?
L2            47 S L1 AND METAL OXIDE (5A) (SUPPORT OR SURFACE OR SUBSTRATE)
L3             8 S L2 AND DIRECT? (4A) AMPLIF?
L4             8 DUP REM L3 (0 DUPLICATES REMOVED)
L5             8 S L4 AND ELUT?
L6            39 S L2 NOT L3
L7            31 S L6 AND BUFFER
L8            31 DUP REM L7 (0 DUPLICATES REMOVED)
L9            27 S L8 AND AMPLIFICATION

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